

SMITH & LOWNEY, P.L.L.C.
2317 EAST JOHN STREET
SEATTLE, WASHINGTON 98112
(206) 860-2883, FAX (206) 860-4187

February 28, 2019

RECEIVED ON:

ORC

MAR - 5 2019

no CMS

EPA Region 10

Office of the Regional Administrator

Via Certified Mail - Return Receipt Requested

Managing Agent
SSA Marine, Inc.
1131 SW Klickitat Way
Seattle, WA 98134

Managing Agent
SSA Terminals, LLC
1131 SW Klickitat Way
Seattle, WA 98134

Managing Agent
SSA Terminals (Tacoma), LLC
1131 SW Klickitat Way
Seattle, WA 98134

Re: NOTICE OF INTENT TO SUE UNDER THE CLEAN WATER ACT

Dear Managing Agents:

We represent Puget Soundkeeper Alliance (Soundkeeper), 130 Nickerson St., #107, Seattle, WA 98109, (206) 297-7002. Any response or correspondence related to this matter should be directed to us at the letterhead address. This letter is to provide you with sixty days notice of Soundkeeper's intent to file a citizen suit against SSA Terminals, LLC, d.b.a SSA Terminals (Tacoma), LLC, d.b.a. SSA Marine, Inc. ("SSA") under section 505 of the Clean Water Act ("CWA"), 33 U.S.C. § 1365, for the violations described below, or amend our claims in Western District of Washington Case No. 3:17-cv-05016-BHS to include the violations described below.

I. Industrial Stormwater General Permit requirements

The CWA, 33 U.S.C. §§ 1311 and 1342, prohibits the discharge of pollutants, including stormwater associated with industrial activity, to waters of the United States, except as authorized by a National Pollutant Discharge Elimination System ("NPDES") permit. The Washington Department of Ecology ("Ecology") authorizes discharges of stormwater associated with certain industrial activities under the Industrial Stormwater General Permit, including stormwater discharged from marine cargo handling facilities. The facility subject to this notice is a marine cargo terminal located at or about 1675 Lincoln Ave, Tacoma, WA 98241 (the "facility" or "site") and includes any contiguous or adjacent properties. The

facility discharges industrial stormwater and pollutants to the Sircum Waterway, part of Commencement Bay and the Puget Sound directly and/or via a stormwater drainage system.

Stormwater and pollutants discharged from the site are “stormwater discharges associated with industrial activity” subject to the 33 U.S.C. § 1311(a) prohibition on discharges of pollutants without NPDES permit authorization. *See also*, 33 U.S.C. § 1342(p) and 40 C.F.R. § 122.26(a), (b)(14), and (c). The current Industrial Stormwater General Permit (“Permit”) was issued by Ecology on December 3, 2014, effective January 2, 2015, and set to expire on December 31, 2019. The facility at issue was granted coverage under the Permit under NPDES Permit No. WAR305772 on October 2, 2017. The coverage was granted to the Port of Tacoma, the property’s owner. This permit coverage will eventually transfer to SSA per the terms of SSA’s lease with the Port of Tacoma. SSA became the facility operator and lessor at this facility on October 2, 2017, which is the date it began industrial operations and/or discharging industrial stormwater from the facility.

While SSA is not the named permittee at this facility, it is the facility operator, and is therefore liable for permit violations occurring at this facility. *See* 33 U.S.C. § 1311(a) (“the discharge of any pollutant by *any person* shall be unlawful.”) (emphasis added); *Puget Soundkeeper All. v. APM Terminals Tacoma, LLC*, No. C17-5016 BHS, 2018 U.S. Dist. LEXIS 93567, *10 (W.D. Wash. June 4, 2018) (Liability for violations of the Permit “does not . . . revolve around the person’s status as a ‘permittee.’”); *Assateague Coastkeeper v. Alan & Kristin Hudson Farm*, 727 F. Supp. 2d 433, 442 (D. Md. 2010) (“[T]he CWA imposes liability both on the party who actually performed the work and on the party with responsibility for or control over performance of the work.”) (quotation and citations omitted); *id.* (“The statute clearly makes violations by ‘any person’ unlawful, not solely permit holders.”) (citation omitted); *United States v. Gulf Park Water Co.*, 972 F. Supp. 1056, 1063 (S.D. Miss. 1997) (“The ability to control the facility, coupled with knowledge of the violation, is also sufficient to impose liability under the CWA.”).

As the operator of this facility, SSA is the party “perform[ing] the work” and it has the “ability to control the facility,” which confers liability to SSA for permit violations. *Assateague Coastkeeper*, 727 F. Supp. at 442; *Gulf Park Water Co.*, 972 F. Supp. at 1063. SSA has the ability to make timely discovery of discharges, control the mechanisms causing pollution at the facility, and prevent and damage associated with discharges. Due to SSA’s operation of the facility and SSA’s arrangements with the Port of Tacoma related to stormwater management at the site, including its implementation of the facility’s SWPPP, the Permit imposes legal obligations on SSA to correct the Permit violations identified below. Soundkeeper hereby provides notice of its intent to sue for these violations.

A. Violations of Water Quality Standards

Condition S10.A of the Permit prohibits discharges that cause or contribute to violations of water quality standards. Water quality standards are the foundation of the CWA and Washington’s efforts to protect clean water. In particular, water quality standards represent the U.S. Environmental Protection Agency (“EPA”) and Ecology’s determination, based on scientific studies, of the thresholds at which pollution starts to cause significant

adverse effects on fish or other beneficial uses. For each water body in Washington, Ecology designates the “beneficial uses” that must be protected through the adoption of water quality standards.

A discharger must comply with both narrative and numeric criteria for water quality standards. WAC 173-201A-010; WAC 173-201A-510 (“No waste discharge permit can be issued that causes or contributes to a violation of water quality criteria, except as provided for in this chapter.”). Narrative water quality standards provide legal mandates that supplement the numeric criteria. Furthermore, the narrative water quality standard applies with equal force even if Ecology has established a numeric water quality standard. Specifically, Condition S10.A of the Permits requires that the facility’s discharges not cause or contribute to a violation of Washington State water quality standards.

The Permit authorizes discharges from SSA’s facility to the Sircum Waterway via a stormwater conveyance system, comprising both collection and conveyance facilities, such as catch basins and pipes, which then discharges to Commencement Bay. SSA discharges stormwater that contains elevated levels of copper, zinc, turbidity, and total suspended solids (“TSS”) as indicated in the table of benchmark exceedances below. These discharges cause and/or contribute to violations of water quality standards in the Sircum Waterway and Commencement Bay and have occurred each and every day since October 2, 2017 on which there was 0.1 inches or more of precipitation, and continue to occur. These water quality standards include those set forth in WAC 173-201A-210(e), 240(3) and 260(2)(a). Precipitation data from that time period is appended to this notice of intent to sue and identifies these days.

Table 1 – Benchmark Exceedances

Quarter in which sample collected (monitoring point)	TSS (Benchmark 30 mg/L)	Copper Concentration (Benchmark 14 ug/L)	Zinc (Benchmark 117 ug/L)	Turbidity (Benchmark 25 NTU)
4Q 2017 October WS1		32.3	206.8	42.1
4Q 2017 October WS3	31.4	27.7	225.2	47.5
4Q 2017 November WS1		16.8		
4Q 2017 November WS3			161.4	26.1
4Q 2017 December WS3	35.1		152.2	34.7

1Q 2018 WS1				30.23
2Q 2018 WS1		45.5	125	30.7
2Q 2018 WS2		18.5		
2Q 2018 WS3	31	21	173	48.7
3Q 2018 WS3	31		171	47.1
4Q 2018 WS1	42	30.15	252	42
4Q 2018 WS2	40.5	19.15	271	80.5
4Q 2018 WS3			181.3	30.8

*WS1, WS2, and WS3 are the facility's designated monitoring points.

Additionally, these discharges are causing or contributing to violations of sediment quality standards as set forth in WAC 173-204-320(2)(f) for the following pollutants: 1,2,4-Trichlorobenzene, 1,4-Dichlorobenzene, 2,4-Dimethylphenol, Dibenzo[a,h]anthracene, 2-Methylnaphthalene, 2-Methylphenol, Di-N-Octyl Phthalate, 4-Methylphenol, Pentachlorophenol, Hexachlorobenzene, Hexachlorobutadiene, Acenaphthene, Anthracene, Arsenic, Bis(2-Ethylhexyl) Phthalate, Benz[a]anthracene, Benzo[a]pyrene, Benzoic Acid, Benzyl Alcohol, Benzo[g,h,i]perylene, Butyl benzyl phthalate, Cadmium, Chromium, Chrysene, Copper, Diethyl phthalate, Dibenzofuran, Dibutyl phthalate, Dimethyl phthalate, Fluoranthene, Fluorene, High Molecular Weight Polycyclic Aromatic Hydrocarbons (H-PAH), Indeno(1,2,3-c,d)pyrene, Lead, Low Molecular Weight Polycyclic Aromatic Hydrocarbons (L-PAH), Mercury, Naphthalene, N-Nitrosodiphenylamine, PCB, Phenanthrene, Phenol, Pyrene, Silver, Benzofluoranthenes, Total (b+k+j), Zinc, and Sediment Bioassay.

B. Compliance with standards.

Condition S10.C of the Permit requires permittees to apply all known and reasonable methods of prevention, control and treatment ("AKART") to all discharges, including preparation and implementation of an adequate stormwater pollution prevention plan ("SWPPP") and best management practices ("BMPs"). As SSA is the operator of this facility and is responsible for implementation of the SWPPP, it is also responsible for violations of this permit condition. SSA is in violation of the requirements to apply AKART to its discharges or implement adequate BMPs at the facility, including structural source control BMPs to minimize the exposure of pollutants to precipitation, and stormwater treatment BMPs to remove pollutants prior to discharge. These violations include, but are not limited to any operation of this facility without a stormwater treatment system in place, and without a stormwater treatment system which treats stormwater discharges from the facility's wharf.

C. Monitoring

Condition S4.B.2 of the Permit requires permittees to sample quarterly each distinct point of discharge off-site except as otherwise exempt from monitoring as a “substantially identical outfall” per Permit Condition S3.B.5.b. Condition S4.B.3 of the Permit requires permittees to record and retain specified information about each stormwater sample taken, including a notation describing if they collected the sample within the first 12 hours of stormwater discharge events and, if not, an explanation why not. Conditions S4.A and B of the Permit require permittees to collect stormwater samples no less than once per quarter. Condition S9.A of the Permit requires permittees to report results of analysis of these samples to Ecology on specified forms (Discharge Monitoring Reports, or “DMRs”) on a specified schedule. As the operator of this facility, and as a party exercising responsibility for or control over the discharges, SSA is liable for violations of this permit condition.

SSA is in violation of these monitoring requirements because it has failed to collect stormwater discharge samples from each distinct point of discharge and/or report the results to Ecology on DMRs, including from the discharge points in the facility’s wharf, in each and every quarter since it commenced operations on October 2, 2017. These un-sampled and unreported discharge points in the wharf include approximately 138 three inch diameter deck drains in between the crane rails, approximately 100 scupper holes along the bull rail, the utility vault which runs the length of the wharf, and the expansion joint. SSA is also in violation of these monitoring requirements for failing to collect a discharge sample and report the results to Ecology for discharges from Outfall WS2 during the 4th Quarter of 2017.

D. Stormwater Pollution Prevention Plan Violations

Condition S3.A.1 of the Permit requires permittees to develop and implement a SWPPP as specified. A representative of SSA is listed as a member of the “pollution prevention team” and a “responsible” person in this facility’s SWPPP, and SSA helped to develop this facility’s SWPPP. As the operator of this facility, and as a party exercising responsibility for or control over the discharges, including due to its implementation of the SWPPP, SSA is liable for violations of this permit condition.

Condition S3.A.2 of the Permit requires the SWPPP to specify BMPs necessary to provide AKART and ensure that discharges do not cause or contribute to violations of water quality standards. SSA has violated these requirements of the Permits each and every day during the last five years and continues to violate them as it has failed to prepare and/or implement a SWPPP that includes AKART BMPs and BMPs necessary to comply with state water quality standards.

Condition S3.A of the Permit requires the facility to have and implement a SWPPP that is consistent with permit requirements, fully implemented as directed by permit conditions, and updated as necessary to maintain compliance with permit conditions. On information and belief, SSA has violated these requirements of the Permit each and every day since commencing operations on October 2, 2017 and continues to violate them because its

SWPPP is not consistent with permit requirements, has not been fully implemented, and has not been updated as necessary.

The SWPPP fails to satisfy the requirements of Condition S3 of the Permit because it does not adequately describe BMPs. Condition S3.B.4 of the Permit requires that the SWPPP include a description of the BMPs that are necessary for the facility to eliminate or reduce the potential to contaminate stormwater. Condition S3.A.3 of the Permit requires that the SWPPP include BMPs consistent with approved stormwater technical manuals or document how stormwater BMPs included in the SWPPP are demonstratively equivalent to the practices contained in the approved stormwater technical manuals, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs. This facility's SWPPP does not comply with these requirements because it does not adequately describe BMPs and does not include BMPs consistent with approved stormwater technical manuals nor does it include BMPs that are demonstratively equivalent to such BMPs with documentation of BMP adequacy. Specifically, the SWPPP fails to describe the custom deck drain filter inserts used on the wharf.

The SWPPP fails to satisfy the requirements of Condition S3.B.1 of the Permits because it does not include a site map that identifies significant features, the stormwater drainage and discharge structures, the stormwater drainage areas for each stormwater discharge point off-site, a unique identifying number for each discharge point, and areas of pollutant contact associated with specific industrial activities. Specifically, the SWPPP fails to identify all discharge points from the wharf, assign a unique identifying number to each of these discharge points, identify the wharf as a separate drainage area, and identify areas of pollutant contact on the wharf.

Condition S3.B.4 of the Permit requires that permittees include in their SWPPPs and implement certain mandatory BMPs and that the permittee explain in detail how and where the selected BMPs will be implemented. SSA is in violation of this requirement because it has failed to implement the mandatory BMPs of the Permit. Specifically, SSA is not implementing the mandatory good housekeeping BMP of keeping all dumpsters under cover or fit with a lid that must remain closed when not in use.

The SWPPP fails to satisfy the requirements of Condition S3.B.5 Permit because it fails to include an adequate stormwater sampling plan as required. The SWPPP does not include a sampling plan that identifies points of discharge to surface waters or document why each discharge point is not sampled. Specifically, the SWPPP sampling plan fails to adequately identify the discharge points in the wharf or explain why these discharge points are not sampled.

II. Conclusion

The above-described violations reflect those indicated by the information currently available to Soundkeeper. These violations are ongoing. Soundkeeper intends to sue for all violations, including those yet to be uncovered and those committed after the date of this notice of intent to sue.

Under Section 309(d) of the CWA, 33 U.S.C. § 1319(d), each of the above-described violations subjects the violator to a penalty of up to \$37,500 per day for each violation for violations committed through November 2, 2015 and up to \$54,833 per day for each violation committed thereafter. In addition to civil penalties, Soundkeeper will seek injunctive relief to prevent further violations under Sections 505(a) and (d) of the CWA, 33 U.S.C. § 1365(a) and (d), and such other relief as is permitted by law. Section 505(d) of the CWA, 33 U.S.C. § 1365(d), also permits prevailing parties to recover costs, including attorney's fees.

Soundkeeper believes that this NOTICE OF INTENT TO SUE sufficiently states grounds for filing suit. We intend, at the close of the 60-day notice period to file a citizen suit against SSA under Section 505(a) of the Clean Water Act or to amend the complaint in W.D. Wash. Case No. 3:17-cv-05016-BHS. If you wish to discuss this matter you may contact us by phone or mail (see letterhead), or by e-mail at alyssa@smithandlowney.com or knoll@smithandlowney.com.

Sincerely,

SMITH & LOWNEY, PLLC

By: 
Knoll Lowney
Alyssa Englebrecht

cc: Andrew Wheeler, Acting Administrator, U.S. EPA
Chris Hladick, Administrator, Region 10 U.S. EPA
Maia Bellon, Director, Washington Department of Ecology
Candice M. Woods, Registered Agent, SSA Terminals, LLC, SSA Marine, Inc., SSA Terminals (Tacoma), LLC, 1131 SW Klickitat Way, Seattle, WA 98134-1108

U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW00094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth		8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	F flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	10	01															
2017	10	02	59	45		0.00											
2017	10	03	64	43		0.00											
2017	10	04	64	43		0.00											
2017	10	05	66	42		0.00											
2017	10	06	64	45		0.05											
2017	10	07	61	47		0.00											
2017	10	08	59	43		0.00											
2017	10	09	61	40		0.00											
2017	10	10	59	45	T												
2017	10	11	56	43		0.03											
2017	10	12	52	42		0.55											
2017	10	13	52	42		0.00											
2017	10	14	55	38		0.00											
2017	10	15	61	40		0.00											
2017	10	16	60	42		0.00											
2017	10	17	59	47		0.10											
2017	10	18	61	46		1.58											
2017	10	19	52	49		1.07											
2017	10	20	52	45		0.17											
2017	10	21	57	44		2.04											
2017	10	22	58	48		0.16											
2017	10	23	63	46		0.00											
2017	10	24	61	44		0.00											
2017	10	25	60	43	T												
2017	10	26	56	50		0.00											
2017	10	27	61	47		0.00											
2017	10	28	65	43		0.00											
2017	10	29	53	45		0.00											
2017	10	30	60	48		0.00											
2017	10	31	57	37		0.00											
Summary			59	44		5.75		0.0									

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
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 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
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 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation			Evaporation		Soil Temperature (F)			
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 In. Depth	
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Max.	Min.
2017	11	01	55	46	T								
2017	11	02	48	41		0.28							
2017	11	03	42	34		0.09							
2017	11	04	41	33		0.45							
2017	11	05	40	32		0.33							
2017	11	06	45	33		0.00							
2017	11	07	47	37		0.00							
2017	11	08	51	41		0.42							
2017	11	09	49	40		0.46							
2017	11	10	48	36	T								
2017	11	11	52	40		0.08							
2017	11	12	55	48		0.43							
2017	11	13	55	44		1.04							
2017	11	14	53	44		0.10							
2017	11	15	51	43		0.78							
2017	11	16	44	41		0.21							
2017	11	17	49	40	T								
2017	11	18	51	41		0.00							
2017	11	19	50	40		0.73							
2017	11	20	49	38		0.29							
2017	11	21	59	39		1.10							
2017	11	22	67	56		0.54							
2017	11	23	58	47		0.29							
2017	11	24	50	45		0.01							
2017	11	25	48	39		0.20							
2017	11	26	55	41		0.44							
2017	11	27	50	41	T								
2017	11	28	45	42		0.58							
2017	11	29	49	41		0.01							
2017	11	30	44	40		0.31							
Summary			50	41		9.17		0.0					

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Baro muck; 0=Unknown

s This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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U.S. Department of Commerce

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Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W

Station: TACOMA NARROWS AIRPORT, WA US USW00094274

Record of Climatological Observations

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Generated on 02/27/2019

National Centers for Environmental Information

151 Patton Avenue

Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 In. Depth		8 In. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see ")	Max.	Min.	Ground Cover (see ")	Max.	Min.
2017	12	01	47	42		0.37											
2017	12	02	44	40		0.59											
2017	12	03	45	38		0.05											
2017	12	04	43	35		0.00											
2017	12	05	43	32		0.00											
2017	12	06	49	39		0.00											
2017	12	07	42	32		0.00											
2017	12	08	37	33		0.00											
2017	12	09	43	32		0.00											
2017	12	10	45	31		0.00											
2017	12	11	46	31		0.00											
2017	12	12	45	31		0.00											
2017	12	13	48	34		0.00											
2017	12	14	45	33		0.00											
2017	12	15	43	35		0.04											
2017	12	16	44	35		0.10											
2017	12	17	49	42		0.03											
2017	12	18	48	41		0.50											
2017	12	19	49	39		1.10											
2017	12	20	43	30		0.03											
2017	12	21	40	28		T											
2017	12	22	39	36		0.09											
2017	12	23	38	31		0.00											
2017	12	24	36	31		0.07											
2017	12	25	35	32		0.06											
2017	12	26	36	31		0.00											
2017	12	27	39	33		0.00											
2017	12	28	46	38		0.83											
2017	12	29	53	44		1.58											
2017	12	30	47	37		0.05											
2017	12	31	41	35		0.00											
Summary			43	35		5.49		0.0									

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

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			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ico Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	01	01	42	31		0.00											
2018	01	02	40	33		T											
2018	01	03	46	30		0.00											
2018	01	04	45	35		0.25											
2018	01	05	49	43		0.57											
2018	01	06	49	42		T											
2018	01	07	43	41		0.40											
2018	01	08	45	41		0.13											
2018	01	09	46	41		0.12											
2018	01	10	44	41		0.24											
2018	01	11	49	41		1.39											
2018	01	12	50	47		0.08											
2018	01	13	53	45		0.02											
2018	01	14	49	39		0.00											
2018	01	15	59	40		0.05											
2018	01	16	54	42		0.12											
2018	01	17	51	42		0.29											
2018	01	18	51	41		0.42											
2018	01	19	46	41		0.04											
2018	01	20	48	39		0.12											
2018	01	21	49	39		0.17											
2018	01	22	45	38		0.40											
2018	01	23	47	38		1.13											
2018	01	24	49	39		0.48											
2018	01	25	44	38		0.16											
2018	01	26	41	37		0.37											
2018	01	27	48	40		0.30											
2018	01	28	54	42		0.08											
2018	01	29	54	42		0.74											
2018	01	30	47	39		0.02											
2018	01	31	45	39		0.03											
		Summary	48	39		8.12		0.0									

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW0094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 In. Depth		8 In. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	02	01	45	41		0.45											
2018	02	02	51	44		0.13											
2018	02	03	51	47		0.02											
2018	02	04	54	47		T											
2018	02	05	50	45		T											
2018	02	06	48	43		0.01											
2018	02	07	54	46		0.00											
2018	02	08	53	43		T											
2018	02	09	47	37		T											
2018	02	10	44	34		0.00											
2018	02	11	44	34		0.00											
2018	02	12	44	30		0.00											
2018	02	13	47	28		0.14											
2018	02	14	42	35		0.06											
2018	02	15	44	34		0.00											
2018	02	16	46	40		0.11											
2018	02	17	48	38		0.47											
2018	02	18	38	29		0.09											
2018	02	19	36	28		0.00											
2018	02	20	33	28		T											
2018	02	21	33	26		0.05											
2018	02	22	37	25		T											
2018	02	23	36	25		0.04											
2018	02	24	44	34		0.07											
2018	02	25	41	34		0.22											
2018	02	26	43	33		0.00											
2018	02	27	46	37		T											
2018	02	28	46	39		0.15											
Summary			44	36		2.01		0.0									

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*s: This data value failed one of NCDC's quality control tests.

*T: values in the Precipitation or Snow category above indicate a "trace" value was recorded.

*A: values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW00094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		At Observation	Precipitation			At Obs. Time	Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time				24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 In. Depth		8 In. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)		Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	03	01	49	34		0.08											
2018	03	02	45	37		0.11											
2018	03	03	49	35		0.00											
2018	03	04	48	33		0.17											
2018	03	05	46	37		0.00											
2018	03	06	51	34		0.00											
2018	03	07	47	38		0.03											
2018	03	08	51	37		0.40											
2018	03	09	49	36		T											
2018	03	10	56	33		0.00											
2018	03	11	63	36		0.00											
2018	03	12	71	40		0.00											
2018	03	13	61	43		0.20											
2018	03	14	51	40		0.01											
2018	03	15	55	32		0.00											
2018	03	16	54	40		0.00											
2018	03	17	53	36		0.00											
2018	03	18	53	39		0.00											
2018	03	19	54	36		0.00											
2018	03	20	54	35		0.00											
2018	03	21	56	36		0.14											
2018	03	22	48	38		0.39											
2018	03	23	46	37		0.21											
2018	03	24	46	35		0.18											
2018	03	25	52	35		0.00											
2018	03	26	45	40		0.08											
2018	03	27	54	44		0.05											
2018	03	28	51	41		0.00											
2018	03	29	52	41		0.00											
2018	03	30	57	43		0.00											
2018	03	31	56	44		0.00											
Summary			52	38		2.05		0.0									

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*s This data value failed one of NCDC's quality control tests.

*T values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW0094274

Record of Climatological Observations
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 Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)			
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	4 in. Depth	
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Fлаг	Snow, Ice Pellets, Hail (in)					Max.	Min.
2018	04	01	48	37		0.10								
2018	04	02	52	34		0.00								
2018	04	03	50	38		T								
2018	04	04	47	40		0.30								
2018	04	05	53	44		0.31								
2018	04	06	64	50		0.02								
2018	04	07	56	46		0.85								
2018	04	08	50	46		0.51								
2018	04	09	60	40		0.00								
2018	04	10	59	46		0.18								
2018	04	11	53	41		0.25								
2018	04	12	51	40		0.17								
2018	04	13	51	42		0.55								
2018	04	14	51	43		1.37								
2018	04	15	49	42		0.23								
2018	04	16	46	40		0.49								
2018	04	17	51	41		0.01								
2018	04	18	57	38		T								
2018	04	19	60	39		0.00								
2018	04	20	60	41		T								
2018	04	21	56	44		0.11								
2018	04	22	57	44		0.00								
2018	04	23	67	44		0.00								
2018	04	24	75	44		0.00								
2018	04	25	70	48		0.00								
2018	04	26	79	47		0.00								
2018	04	27	56	47		0.05								
2018	04	28	54	46		0.11								
2018	04	29	58	43		T								
2018	04	30	57	46		0.00								
Summary			57	43		5.61		0.0						

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW0094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Obs. Time	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (ml)	Amount of Evap. (in)	4 In. Depth		8 In. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	05	01	59	47		0.00											
2018	05	02	68	42		0.00											
2018	05	03	72	47		0.00											
2018	05	04	63	49		T											
2018	05	05	64	49		T											
2018	05	06	76	49		0.00											
2018	05	07	66	51		0.00											
2018	05	08	73	50		0.02											
2018	05	09	64	51		0.01											
2018	05	10	60	48		0.04											
2018	05	11	63	47		0.00											
2018	05	12	70	46		T											
2018	05	13	79	51		0.00											
2018	05	14	83	54		0.00											
2018	05	15	66	53		0.00											
2018	05	16	63	52		0.00											
2018	05	17	66	50		0.00											
2018	05	18	61	50		T											
2018	05	19	70	53		0.09											
2018	05	20	66	52		0.00											
2018	05	21	68	50		0.00											
2018	05	22	73	49		0.00											
2018	05	23	77	52		0.00											
2018	05	24	68	52		0.00											
2018	05	25	66	50		0.00											
2018	05	26	65	49		0.00											
2018	05	27	73	47		0.00											
2018	05	28	68	50		0.00											
2018	05	29	65	47		0.00											
2018	05	30	64	45		0.00											
2018	05	31	63	46		0.03											
		Summary	68	49		0.19		0.0									

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T values in the Precipitation or Snow category above indicate a "trace" value was recorded.

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW0094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 In. Depth		8 In. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	06	01	65	47		0.00											
2018	06	02	76	51		0.00											
2018	06	03	62	51		0.01											
2018	06	04	67	48		T											
2018	06	05	67	46		0.00											
2018	06	06	73	48		0.00											
2018	06	07	66	52		0.00											
2018	06	08	60	50		0.36											
2018	06	09	65	47		0.10											
2018	06	10	59	47		0.24											
2018	06	11	65	47		0.00											
2018	06	12	65	50		T											
2018	06	13	64	52		0.01											
2018	06	14	66	51		0.01											
2018	06	15	69	47		0.00											
2018	06	16	74	51		0.00											
2018	06	17	83	54		0.00											
2018	06	18	85	58		0.00											
2018	06	19	82	53		0.00											
2018	06	20	86	58		0.06											
2018	06	21	65	56		0.00											
2018	06	22	69	55		T											
2018	06	23	70	54		0.02											
2018	06	24	74	51		0.16											
2018	06	25	68	53		T											
2018	06	26	69	51		0.00											
2018	06	27	66	50		0.00											
2018	06	28	66	50		T											
2018	06	29	71	51		0.03											
2018	06	30	66	54		T											
		Summary	69	51		1.00			0.0								

Empty, or blank, cells indicate that a data observation was not reported.

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 282 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW0094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth		8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	07	01	70	54		0.00											
2018	07	02	69	52	T												
2018	07	03	72	47		0.00											
2018	07	04	76	56		0.00											
2018	07	05	83	55	T												
2018	07	06	77	57		0.00											
2018	07	07	71	56		0.03											
2018	07	08	77	53		0.00											
2018	07	09	68	55	T												
2018	07	10	73	57		0.00											
2018	07	11	78	56		0.00											
2018	07	12	85	56		0.00											
2018	07	13	82	57		0.00											
2018	07	14	81	55		0.00											
2018	07	15	88	59		0.00											
2018	07	16	88	59		0.00											
2018	07	17	82	57		0.00											
2018	07	18	75	56		0.00											
2018	07	19	66	52		0.00											
2018	07	20	71	52		0.00											
2018	07	21	74	51		0.00											
2018	07	22	82	53		0.00											
2018	07	23	87	58		0.00											
2018	07	24	86	55		0.00											
2018	07	25	87	57		0.00											
2018	07	26	89	58		0.00											
2018	07	27	85	55		0.00											
2018	07	28	83	56		0.00											
2018	07	29	88	58		0.00											
2018	07	30	86	58		0.00											
2018	07	31	76	58		0.00											
		Summary	79	55		0.03		0.0									

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW0094274

Record of Climatological Observations

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Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Y e a r	M o n t h	D a y	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 In. Depth		8 In. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	F flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	08	01	73	57		0.00											
2018	08	02	70	56		T											
2018	08	03	74	58		T											
2018	08	04	78	54		0.00											
2018	08	05	82	56		0.00											
2018	08	06	85	57		0.00											
2018	08	07	86	56		0.00											
2018	08	08	90	60		0.00											
2018	08	09	88	58		0.00											
2018	08	10	78	58		0.00											
2018	08	11	69	59		0.14											
2018	08	12	70	58		0.00											
2018	08	13	74	55		0.00											
2018	08	14	82	57		0.00											
2018	08	15	83	58		0.00											
2018	08	16	73	56		0.00											
2018	08	17	71	52		0.00											
2018	08	18	76	51		0.00											
2018	08	19	75	56		0.00											
2018	08	20	77	55		0.00											
2018	08	21	87	59		0.00											
2018	08	22	88	57		0.00											
2018	08	23	72	55		0.00											
2018	08	24	67	53		0.00											
2018	08	25	64	51		T											
2018	08	26	63	55		T											
2018	08	27	72	55		0.00											
2018	08	28	79	50		0.00											
2018	08	29	74	53		0.00											
2018	08	30	70	58		0.01											
2018	08	31	67	55		0.00											
Summary			76	56		0.15		0.0									

Empty, or blank, cells indicate that a data observation was not reported.

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U.S. Department of Commerce

National Oceanic & Atmospheric Administration

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W

Station: TACOMA NARROWS AIRPORT, WA US USW0094274

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information

151 Patton Avenue

Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth		8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	09	01	70	51		0.00											
2018	09	02	72	48		0.00											
2018	09	03	72	53		0.00											
2018	09	04	72	49		0.00											
2018	09	05	77	51		0.00											
2018	09	06	84	52		0.00											
2018	09	07	74	53		0.03											
2018	09	08	69	55		0.01											
2018	09	09	73	54		0.06											
2018	09	10	65	56		0.03											
2018	09	11	64	54		0.18											
2018	09	12	63	53		0.02											
2018	09	13	67	53	T												
2018	09	14	65	53		0.06											
2018	09	15	62	51		0.05											
2018	09	16	64	49		0.18											
2018	09	17	64	47		0.00											
2018	09	18	64	44		0.00											
2018	09	19	67	46	T												
2018	09	20	66	52		0.01											
2018	09	21	70	56	T												
2018	09	22	67	53		0.02											
2018	09	23	64	49		0.00											
2018	09	24	65	46		0.00											
2018	09	25	66	45		0.00											
2018	09	26	66	48		0.00											
2018	09	27	69	52		0.00											
2018	09	28	74	55		0.00											
2018	09	29	65	50		0.07											
2018	09	30	63	53		0.03											
		Summary	68	51		0.75		0.0									

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

*a This data value failed one of NCDC's quality control tests.

*T values in the Precipitation or Snow category above indicate a "trace" value was recorded.

*A values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW00094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.
 Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth		8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	F flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	10	01	64	55		0.16											
2018	10	02	60	45		0.08											
2018	10	03	54	42		0.00											
2018	10	04	58	42		0.00											
2018	10	05	49	45		0.57											
2018	10	06	58	47		0.00											
2018	10	07	53	47		0.08											
2018	10	08	55	51		0.08											
2018	10	09	57	48		0.05											
2018	10	10	61	47		0.00											
2018	10	11	61	44		0.00											
2018	10	12	61	44		0.00											
2018	10	13	60	49		0.00											
2018	10	14	63	45		0.00											
2018	10	15	62	43		0.00											
2018	10	16	66	42		0.00											
2018	10	17	68	42		0.00											
2018	10	18	64	43		0.00											
2018	10	19	54	41		0.00											
2018	10	20	54	42		0.00											
2018	10	21	53	43		0.00											
2018	10	22	49	43		0.00											
2018	10	23	52	43		0.04											
2018	10	24	59	49		T											
2018	10	25	56	51		0.90											
2018	10	26	61	49		0.09											
2018	10	27	53	42		0.70											
2018	10	28	55	47		0.38											
2018	10	29	54	45		0.01											
2018	10	30	55	45		T											
2018	10	31	55	48		T											
Summary			58	45		3.14		0.0									

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"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW00094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (ml)	Amount of Evap. (in)	4 in. Depth		8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	11	01	62	55		T											
2018	11	02	60	53		0.09											
2018	11	03	54	51		0.03											
2018	11	04	59	50		T											
2018	11	05	56	46		T											
2018	11	06	55	44		0.01											
2018	11	07	51	36		0.04											
2018	11	08	48	35		0.00											
2018	11	09	42	33		0.03											
2018	11	10	49	39		T											
2018	11	11	48	38		0.00											
2018	11	12	56	39		0.00											
2018	11	13	51	37		T											
2018	11	14	53	45		T											
2018	11	15	54	48		0.00											
2018	11	16	52	47		T											
2018	11	17	51	42		0.00											
2018	11	18	51	37		0.00											
2018	11	19	48	34		0.00											
2018	11	20	50	36		0.00											
2018	11	21	49	43		0.21											
2018	11	22	50	44		0.08											
2018	11	23	48	40		0.99											
2018	11	24	47	35		0.00											
2018	11	25	44	35		0.01											
2018	11	26	55	42		0.35											
2018	11	27	56	47		1.10											
2018	11	28	49	45		0.27											
2018	11	29	48	44		0.04											
2018	11	30	48	41		0.15											
Summary			51	42		3.40		0.0									

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW00094274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Y e a r	M o n t h	D a y	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observa tion	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth		8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2018	12	01	45	35		0.19											
2018	12	02	45	37		0.05											
2018	12	03	43	38		0.00											
2018	12	04	44	33		0.00											
2018	12	05	43	33		0.00											
2018	12	06	44	28		0.00											
2018	12	07	40	26		0.00											
2018	12	08	44	36		T											
2018	12	09	45	39		0.45											
2018	12	10	47	42		0.21											
2018	12	11	48	42		0.48											
2018	12	12	47	41		0.08											
2018	12	13	52	43		0.18											
2018	12	14	54	41		0.04											
2018	12	15	50	40		0.04											
2018	12	16	51	42		0.09											
2018	12	17	51	44		0.06											
2018	12	18	52	44		0.07											
2018	12	19	50	44		0.03											
2018	12	20	58	41		0.23											
2018	12	21	42	34		0.00											
2018	12	22	43	37		0.35											
2018	12	23	46	42		0.76											
2018	12	24	47	39		0.00											
2018	12	25	44	39		0.01											
2018	12	26	43	38		0.23											
2018	12	27	43	36		T											
2018	12	28	47	39		0.17											
2018	12	29	50	42		0.53											
2018	12	30	47	38		0.00											
2018	12	31	42	32		0.00											
		Summary	47	38		4.25		0.0									

Empty, or blank, cells indicate that a data observation was not reported.

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW0084274

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 In. Depth		8 In. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2019	01	01	42	32		0.00											
2019	01	02	47	32		0.01											
2019	01	03	54	45		0.59											
2019	01	04	48	43		0.18											
2019	01	05	46	39		0.08											
2019	01	06	49	34		0.31											
2019	01	07	44	37		0.00											
2019	01	08	43	37		0.16											
2019	01	09	50	41		0.37											
2019	01	10	52	44		0.09											
2019	01	11	55	37		0.00											
2019	01	12	49	34		0.00											
2019	01	13	47	32		0.00											
2019	01	14	41	31		0.00											
2019	01	15	41	33		0.00											
2019	01	16	48	31		0.08											
2019	01	17	53	41		0.17											
2019	01	18	50	43		0.77											
2019	01	19	50	39		0.18											
2019	01	20	46	35		0.00											
2019	01	21	46	34		0.00											
2019	01	22	47	40		0.76											
2019	01	23	50	44		0.16											
2019	01	24	48	38		0.03											
2019	01	25	48	36		0.00											
2019	01	26	47	36		0.00											
2019	01	27	42	36		0.00											
2019	01	28	49	38		0.00											
2019	01	29	51	37		0.00											
2019	01	30	48	32		0.00											
2019	01	31	52	34		0.01											
		Summary	48	37		3.95		0.0									

Empty, or blank, cells indicate that a data observation was not reported.

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U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service
 Current Location: Elev: 292 ft. Lat: 47.2675° N Lon: -122.5761° W
 Station: TACOMA NARROWS AIRPORT, WA US USW00094274

Record of Climatological Observations

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 Generated on 02/27/2019

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F)		Precipitation				Evaporation		Soil Temperature (F)						
			24 Hrs. Ending at Observation Time		At Obs. Observation	24 Hour Amounts Ending at Observation Time			At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth		8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	F flag	Snow, Ice Pellets, Hail (in)				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2019	02	01	49	43		0.52											
2019	02	02	48	36		0.01											
2019	02	03	40	31		0.07											
2019	02	04	32	25		0.01											
2019	02	05	33	21		0.00											
2019	02	06	35	21		0.00											
2019	02	07	38	23		0.00											
2019	02	08	36	30		0.51											
2019	02	09	31	27													
2019	02	10	34	17		0.07											
2019	02	11	37	29		1.28											
2019	02	12	38	36		0.56											
2019	02	13	38	32		T											
2019	02	14	44	33		0.25											
2019	02	15	46	37		0.03											
2019	02	16	43	35		0.06											
2019	02	17	40	31		0.01											
2019	02	18	44	35		T											
2019	02	19	42	38		0.01											
2019	02	20	41	36		0.04											
2019	02	21	45	34		0.00											
2019	02	22	41	34		0.12											
2019	02	23	45	35		0.01											
2019	02	24	40	33		0.19											
2019	02	25															
2019	02	26															
2019	02	27															
2019	02	28															
Summary			40	31		3.75		0.0									

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